

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Fire Code Compliance Specialist**

**Class Code: 60611**

---

### **A. Purpose:**

Reviews construction blueprints and specifications for conformity with Uniform Building, Fire, and Mechanical Codes as well as state and federal laws to ensure construction projects meet state and federal fire and life safety requirements.

### **B. Distinguishing Feature:**

The Fire Code Compliance Specialist reviews blueprints and specifications for conformity with applicable codes and state and federal laws and provides technical assistance on code and law interpretation as it relates to fire and life safety.

The State Inspector conducts a variety of inspections and investigates complaints of businesses and public facilities for various state agencies.

The Deputy State Fire Marshall provides technical assistance for emergency service agencies, law enforcement and the public in the fields of fire safety, education, regulations and determination of fire and/or explosion origin and cause.

### **C. Functions:**

*(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)*

1. Reviews blueprints and specifications for conformity with the Uniform Building, Fire, and Mechanical codes as well as applicable state and federal laws to ensure building meets all fire safety codes.
  - a. Reviews plans for occupancy group of the structure, type of construction, location on property, area or size of the building, height of the building, occupant load, exit considerations, detailed code requirements, mechanical and electrical systems, building accessibility, and fire protection systems and features.
  - b. Utilizes mathematical formulas to determine the size and occupant load of various occupancies, exit width, and proper exit separation; and to check proper live and dead loading, seismic requirements, and snow and wind loading.
  - c. Reviews clear exit width, wheel chair tolerances, wall opening sizes, corridor and stair width and obstructions.
  - d. Examines graphic presentations of a proposed structure to ensure projects meet all pertinent requirements to ensure occupants are afforded sufficient egress to safely exit the building.
  - e. Completes plan-review reports that identify and outline nonconformity issues.
2. Reviews plans for flammable and combustible liquids and LP gas installations to ensure conformance to the Uniform Fire Code and state laws.
  - a. Reviews storage vessel location for proximity and adequate separation from buildings, property lines, and public ways.
  - b. Reviews storage vessels for conformity to specific construction standards.
  - c. Evaluates vent termination and size for location and ensures that regular and emergency vents are sized to prevent the build-up of dangerous pressures.
  - d. Calculates air flow characteristics in relation to volumetric capacity of the tank or vessel.
  - e. Reviews secondary containment for volumetric capacity of the containment minus the wetted area of any tanks inside the containment to contain spills or leaks.
  - f. Evaluates piping for sufficient support and corrosion protection.

- g. Reviews the placement of loading and unloading areas and fuel dispensing equipment for conformance to code requirements.
  - h. Reviews plans for the location of required safety devices.
  - i. Completes plan-review reports that identify and outline nonconformity issues.
- 3. Reviews fire protection systems to include automatic sprinkler system designs and shop drawings, fire alarm system shop drawings, clean agent or halon suppression systems, and dry chemical suppression systems to ensure conformance with state and federal fire protection standards.
  - a. Reviews sprinkler system designs for water supply requirements, hanger spacing, pipe materials, head distribution, head or deflector obstruction, back-flow prevention devices and control valves, riser appurtenances, test locations, and hydraulic design.
  - b. Utilizes mathematical formulas to determine that specified pipe sizes will provide adequate water flow.
  - c. Graphs available water supply to ensure adequate safety margins exist.
  - d. Completes plan-review reports that identify and outline nonconformity issues.
- 4. Reviews fire alarm system shop drawings to ensure conformity with national fire regulations.
  - a. Examines type – wire or support, device location, control specifications, and secondary power sources.
  - b. Reviews battery sizing calculations.
  - c. Completes plan-review reports that identify and outline nonconformity issues.
- 5. Reviews dry chemical, halon, and clean agent suppression systems for conformity with national fire protection standards and Underwriters Laboratories list requirements.
  - a. Reviews designs to verify appropriate pipe materials and lengths, head distribution, agent quantity, and special safety devices.
  - b. Completes plan-review reports that identify and outline nonconformity issues.
- 6. Provides technical assistance to the fire services, code enforcement community, design professionals, law firms, governmental agencies and the public regarding building and fire codes, applicable state laws, mechanical and electrical requirements, accessibility, and fire protection requirements.
  - a. Gives advice on construction requirements as they related to fire protection and fire safety laws.
  - b. Researches reference documents to provide information.
- 7. Reviews Fire and Life Safety inspection reports submitted by State Inspectors for accuracy, completeness, and to determine any required additional follow up.
  - a. Reviews correction schedules and plans submitted by school districts.
  - b. Determines if corrections address all identified problems and will be completed timely.
  - c. Answers questions from State Inspectors and school officials regarding school inspection procedures.
- 8. Responds to consumer complaints regarding manufactured housing to ensure that manufactured homes produced or imported into this state meet federal standards and regulations.
  - a. Conducts site inspections and installation investigations of consumer complaints.
  - b. Conducts annual manufacturer quality control record audits.
  - c. Trains State Inspectors to use the computer reporting program for manufactured home inspections.
  - d. Acts as the system administrator for the computerized reporting system.
- 9. Performs other work as assigned.

#### **D. Reporting Relationships:**

Reports to the Director, State Fire Marshall Program.

#### **E. Challenges and Problems:**

Challenged to obtain compliance with state and federal codes and laws regarding fire and life safety and protection. This is difficult because of the need to gain the owners cooperation in making the necessary changes.

Typical problems include determining if the designer has met all specific code requirements, if reductions or cuts in project costs affect human safety, decreased plan review times, and to accurately answer all demands for technical assistance.

#### **F. Decision-making Authority:**

Decisions made include determining if construction blueprints and specifications are in compliance with applicable codes and laws, if alternate materials and methods of construction are in compliance with the code or its intent, whether safety is being compromised in a design, whether to reject a design, interpretation of codes and their applicability to a construction or design plan, the quality of other's inspection reports, the accuracy and timeliness of correction plans, and determining responsible parties in issues with manufactured housing.

Decisions referred include final decision on appeals of the reviewer's decisions; approval of requests for variances; questions regarding policy, investigations, or press releases; and any required enforcement actions.

#### **G. Contact with Others:**

Daily contact with architects and engineers, the public, and other state agencies to give and receive information; weekly contact with attorneys to provide information on codes; and monthly with law enforcement agencies to provide information.

#### **H. Working Conditions:**

Typical office environment. Some travel is required to conduct field inspections.

#### **I. Knowledge, Skills and Abilities:**

Knowledge of:

- applicable state laws;
- applicable federal requirements;
- Uniform Codes, National Fire Protection Act Standards, and UL listing requirements;
- construction practices and the building trades;
- fire protection methods;
- heating and ventilation equipment;
- fire chemistry;
- general fire safety practices.

Ability to:

- deal tactfully with others;
- read and interpret blue prints, specifications, codes, and state and federal laws;
- understand and use mathematical formulas;
- convey the states position on fire and life safety issues:
- communicate information clearly and concisely.

**J. Licensure or Certification:**

Must possess or be able to obtain certification as a Plans Examiner for the Uniform Building Code within 6 months of employment.